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EXAMINER	
PULLIAM, CHRISTYANN R	

ART UNIT	PAPER NUMBER
2191	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,554	VADON, ERIC R.	
	Examiner	Art Unit	
	Christyann Pulliam	2191	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *4/2/2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/20/04-11/21/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: IDS-4/15/04,1/24/05, 2/16/05, 7/19/05, 9/8/05, 11/3/05.

DETAILED ACTION

1. Claims 1-33, as filed April 2, 2004, are pending for examination.

Drawings

2. The drawings are objected to because "38" in Figure 1 does not point to the query server as the specification says it should. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "35" has been used to designate both end users and a database. In paragraphs [0015-0019] and [0024-0025], the database is referred to by the number

"35". In paragraphs [0022] and [0026-0028] as well as the drawings, the number "42" is used to refer to the database. Appropriate correction required.

4. The use of the trademark "Java™" has been noted in this application (See e.g. paragraph [0023]). The use of the trademark "Foot Locker™" has been noted in this application (See e.g. paragraph [0023]). The use of the trademark "Palm™" has been noted in this application (See e.g. paragraph [0032]). The use of the trademark "Mindspring™" has been noted in this application (See e.g. paragraph [0032]). The use of the trademark "Sony™" has been noted in this application (See e.g. paragraph [0032]). They should be capitalized wherever they appears and be accompanied by the generic terminology. They should also be accompanied by a ® or ™. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

5. The disclosure is objected to because of the following informalities: a missing period. Paragraph [0030] is missing a period at the end of the paragraph. Appropriate correction is required

Claim Objections

6. Claims 30, 31 and 33 are objected to because of the following informalities: spelling error. The word "if" should like be the word "of" in the phrase "the set if search criteria". Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 6-13, 15-26, 28-30 and 32-33 are rejected under 35 U.S.C. § 102(e) as being anticipated by Malpani et al., U.S. PGPub 2004/0260677 (hereinafter Malpani).

9. As for Claim 1, Malpani teaches:

In a database access system that provides access to a database in which items are arranged within item categories, a method for facilitating searches for items, the method comprising:

monitoring actions performed by a plurality of users of the database access system over time to generate user activity data that identifies search criteria specified by the users to search the database of items, and identifies items selected from the database by the users (See e.g. query traffic data and advertisement traffic data – paragraphs [0046 and 0047 and 0050] and Claims 11-15);

programmatically analyzing the user activity data to identify correlations between specific sets of search criteria and specific item categories (See e.g. classification component – paragraphs [0030, 0032-0037]);

generating a mapping structure that maps specific sets of search criteria to specific item categories based at least in-part on the correlations identified by programmatically analyzing the user activity data (See e.g. category model – paragraph [0031]); and

in response to a submission by a user of a search query that includes a set of search criteria, accessing the mapping structure to identify at least one item category that is related to the set of search criteria, and suggesting the at least one item category to the user in conjunction with results of the search query (See e.g. paragraph [0030] and Claim 1).

10. As for Claims 2 and 3, Malpani teaches the use of search strings submitted by users as a search criteria (See e.g. Figure 2 and paragraphs [0027-0029] and paragraph [0010]).

11. As for Claim 6, Malpani teaches:

The method of claim 1, wherein programmatically analyzing the user activity data comprises generating, for a given set of search criteria and a given item category, a score that reflects a frequency with which users who submitted the given set of search criteria also selected an item falling within the given item category (See e.g. paragraphs 0042] and [0046-0047]).

12. As for Claim 7, Malpani teaches:

The method of claim 1, wherein programmatically analyzing the user activity data comprises identifying, for a given set of search criteria, which of a plurality of item categories were accessed the most frequently by users who submitted the given set of search criteria, wherein user selection of an item is treated as an access to a corresponding item category (See e.g. paragraphs [0046-0047]).

13. As for Claim 8, Malpani teaches:

The method of claim 1, wherein programmatically analyzing the user activity data comprises taking into consideration a plurality of different types of item selection actions that are reflected in the user activity data (See e.g. paragraphs [0021 and 0038]).

14. As for Claim 9, Malpani teaches:

The method of claim 8, wherein programmatically analyzing the user activity data further comprises according different weights to different types of item selection actions (See e.g. paragraph [0043 and 0046-0047]).

15. As for Claim 10, Malpani teaches:

The method of claim 1, wherein the item categories include categories of a hierarchical browse structure that is accessible to the users (See e.g. paragraphs [0046-0047] and [0027]).

16. As for Claim 11, Malpani teaches:

The method of claim 10, wherein the correlations take into consideration item selection actions performed by users during browsing of the hierarchical browse structure (See e.g. paragraphs [0046-0047]).

17. As for Claim 12, Malpani teaches:

The method of claim 10, wherein the correlations take into consideration browse category selection actions performed by users during browsing of the hierarchical browse structure (See e.g. paragraphs [0046-0047]).

18. As for Claim 13, Malpani teaches:

The method of claim 1, wherein programmatically analyzing the user activity data comprises identifying, for a given search query submission event within an event history of a user, a subset of item selection events within the event history that are sufficiently proximate to the search query submission event to be treated as related to the search query submission event (See e.g. paragraphs [0046-0047]).

19. As for Claim 15, Malpani teaches:

The method of claim 1, wherein suggesting the at least one item category to the user comprises displaying, on a search results page, a link to page that corresponds to the item category (See e.g. paragraphs [0049] and [0027]).

20. As for Claim 16, Malpani teaches:

The method of claim 1, wherein at least some of the categories represented within the mapping structure are represented in terms of item attributes used to categorize items (See e.g. Figure 2 and paragraph [0029]).

21. As for Claim 17, Malpani teaches:

A system for detecting associations between sets of search criteria and categories of items, the system comprising:

a server system that provides browsable and searchable access to an electronic catalog of items (See e.g. Figure 1 and its description);

a monitoring component that monitors and records search query submissions and selection actions of users of the electronic catalog to generate user activity data (See e.g. training mode - paragraphs [0030, 0032] and traffic data - paragraphs [0046-0047]); and

an analysis component that collectively analyzes the user activity data associated with a plurality of users to identify associations between specific sets of search criteria and specific item categories Classification component – paragraphs [0030, 0032-0037].

22. As for Claims 18 and 19, Malpani teaches the use of search strings submitted by users as a search criteria (See e.g. Figure 2 and paragraphs [0027-0029] and paragraph [0010]).

23. As for Claim 20, Malpani teaches:

The system of claim 17, wherein the analysis component generates, for a given set of search criteria and a given item category, a score that reflects a frequency with which users who submitted the given set of search criteria also selected an item falling within the given item category (See e.g. paragraphs 0042] and [0046-0047]).

24. As for Claim 21, Malpani teaches:

The system of claim 17, wherein the analysis component identifies, for a given set of search criteria, which of a plurality of item categories were accessed the most frequently by users who submitted the given set of search criteria, wherein user

selection of an item is treated as an access to a corresponding item category (See e.g. paragraphs [0046-0047]).

25. As for Claim 22, Malpani teaches:

The system of claim 17, wherein the analysis component takes into consideration a plurality of different types of item selection actions that are reflected in the user activity data (See e.g. paragraphs [0021 and 0038]).

26. As for Claim 23, Malpani teaches:

The system of claim 17, wherein the item categories include browse categories of a hierarchical browse structure of the electronic catalog (See e.g. paragraphs [0046-0047] and [0027]).

27. As for Claim 24, Malpani teaches:

The system of claim 23, wherein the associations identified by the analysis component reflect item selection actions performed by users during browsing of the hierarchical browse structure (See e.g. paragraphs [0046-0047]).

28. As for Claim 25, Malpani teaches:

The system of claim 23, wherein the associations identified by the analysis component reflect browse category selection actions performed by users during browsing of a hierarchical browse structure of the electronic catalog (See e.g. paragraphs [0046-0047]).

29. As for Claim 26, Malpani teaches:

The system of claim 17, wherein the analysis component identifies, for a given search query submission event within an event-history of a user, a subset of item

selection events within the event history that are sufficiently proximate to the search query submission event to be treated as related to the search query submission event (See e.g. paragraphs [0046-0047]).

30. As for Claim 28, Malpani teaches:

The system of claim 17, wherein the server system uses the associations identified by the analysis component to select item categories to display on search results pages (See e.g. paragraphs [0049] and [0027]).

31. As for Claim 29, Malpani teaches:

A method of processing query submissions, comprising:

receiving a user submission of a set of search criteria for searching a database of items (See e.g. paragraphs [0010] and [0027-0029]);

identifying a set of items within the database that are responsive to the set of search criteria (See e.g. paragraphs [0010-0012] and [0027-0029]);

accessing a mapping structure to look up at least one item category that, based on an automated analysis of user event histories, has been accessed relatively frequently by users who have previously submitted the set of search criteria (See e.g. paragraphs [0027-0032] and [0045-0047]); and

responding to the user submission by generating and returning a search results page that lists the responsive items and the at least one item category (See e.g. paragraphs [0010] and [0027-0029]).

32. As for Claims 30, 32 and 33, Malpani teaches the use of search strings submitted by users as a search criteria (See e.g. Figure 2 and paragraphs [0027-0029] and paragraph [0010]).

Claim Rejections - 35 USC § 103

33. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

34. Claims 4, 5, 14, 27 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Malpani as applied to Claims 1, 3, 17, 29 and 30 above, in view of Hosken, U.S. Patent No. 6,438,579 (hereinafter Hosken).

35. As for Claim 4, Malpani teaches the method of Claims 1 and 3 as described above. Malpani does not specifically teach field identifiers as search criteria. However, Hosken teaches wherein the sets of search criteria further include field identifiers selected by the users to perform field-restricted searches (See e.g. Col. 5, lines 30-42 and col. 12, lines 9-21 and Table IV).

36. Malpani and Hosken are from the analogous art of making recommendations to users during searching. It would have been obvious to one of ordinary skill in the art to combine Malpani and Hosken.

37. The motivation to combine Malpani and Hosken comes from the common goal of efficiently and accurately making item and category recommendations to users in response to search queries. Both relate search terms to other categories and items in which the user might have an interest. Neither want these systems to rely on manually linked content or lack the ability to change over time (See e.g. Malpani paragraph [0004-0007] and Hosken col. 1, line 40- col. 2, line 21). Malpani generally describes text search queries. However, Hosken expands the functionality of Malpani by allowing users to search within a subgroup or collection or a field.

38. As for Claim 5, Malpani teaches the method of Claims 1 and 3 as described above. Malpani does not specifically teach collections as search criteria. However, Hosken teaches wherein the sets of search criteria further include item collection identifiers selected by the users to limit searches to specific collections of items (See e.g. Col. 5, lines 30-42 and col. 12, lines 9-21 and Table IV).

39. Malpani and Hosken are from the analogous art of making recommendations to users during searching. It would have been obvious to one of ordinary skill in the art to combine Malpani and Hosken.

40. The motivation to combine Malpani and Hosken comes from the common goal of efficiently and accurately making item and category recommendations to users in response to search queries. Both relate search terms to other categories and items in which the user might have an interest. Neither want these systems to rely on manually linked content or lack the ability to change over time (See e.g. Malpani paragraph [0004-0007] and Hosken col. 1, line 40- col. 2, line 21). Malpani generally describes

text search queries. However, Hosken expands the functionality of Malpani by allowing users to search within a subgroup or collection or a field.

41. As for Claim 14, Malpani teaches the method of Claim 1 as described above. Malpani does not specifically teach using time segments. However, Hosken teaches wherein programmatically analyzing the user activity data comprises dividing the user activity data into a plurality of segments that correspond to specific time intervals, analyzing the segments separately from one another to generate multiple correlation result sets, and combining the multiple correlation result sets (See e.g. col. 11, lines 40-65).

42. Malpani and Hosken are from the analogous art of making recommendations to users during searching. It would have been obvious to one of ordinary skill in the art to combine Malpani and Hosken.

43. The motivation to combine Malpani and Hosken comes from the common goal of efficiently and accurately making item and category recommendations to users in response to search queries. Both relate search terms to other categories and items in which the user might have an interest. Neither want these systems to rely on manually linked content or lack the ability to change over time (See e.g. Malpani paragraph [0004-0007] and Hosken col. 1, line 40- col. 2, line 21). Malpani acknowledges allowing correlations to change over time based on data collected. However, Hosken expands on the functionality of Malpani by using time intervals to impact the recommendations made to users.

44. As for Claims 27, Malpani teaches the method of Claim 17 as described above. Malpani does not specifically teach using time segments. However, Hosken teaches wherein the analysis component divides the user activity data into a plurality of segments that correspond to specific time intervals, analyzes the segments separately from one another to generate multiple correlation result sets, and combines the multiple correlation result sets (See e.g. col. 11, lines 40-65).

45. Malpani and Hosken are from the analogous art of making recommendations to users during searching. It would have been obvious to one of ordinary skill in the art to combine Malpani and Hosken.

46. The motivation to combine Malpani and Hosken comes from the common goal of efficiently and accurately making item and category recommendations to users in response to search queries. Both relate search terms to other categories and items in which the user might have an interest. Neither want these systems to rely on manually linked content or lack the ability to change over time (See e.g. Malpani paragraph [0004-0007] and Hosken col. 1, line 40- col. 2, line 21). Malpani acknowledges allowing correlations to change over time based on data collected. However, Hosken expands on the functionality of Malpani by using time intervals to impact the recommendations made to users.

47. As for Claim 31, Malpani teaches the method of Claim 30 as described above. Malpani does not specifically teach using search fields or collection to limit search. However, Hosken teaches wherein the set if search criteria additionally comprises at least one of the following: (a) an identification of a search field for performing a field-

restricted search; (b) an identification of a collection of items to be searched (See e.g. Col. 5, lines 30-42 and col. 12, lines 9-21 and Table IV).

48. Malpani and Hosken are from the analogous art of making recommendations to users during searching. It would have been obvious to one of ordinary skill in the art to combine Malpani and Hosken.

49. The motivation to combine Malpani and Hosken comes from the common goal of efficiently and accurately making item and category recommendations to users in response to search queries. Both relate search terms to other categories and items in which the user might have an interest. Neither want these systems to rely on manually linked content or lack the ability to change over time (See e.g. Malpani paragraph [0004-0007] and Hosken col. 1, line 40- col. 2, line 21). Malpani generally describes text search queries. However, Hosken expands the functionality of Malpani by allowing users to search within a subgroup or collection or a field.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christyann Pulliam whose telephone number is 571-270-1007. The examiner can normally be reached on M-Th 7:30 am-5 pm, every other Fri 7:30am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bruce can be reached on 571-272-2487. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRFP

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SUPERVISORY PATENT EXAMINER